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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/457,952	12/09/1999	GUILLAUME SEBIRE	874.0002USU	8252

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EXAMINER

NGUYEN, DAVID Q

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/457,952

Applicant(s)

SEBIRE ET AL.

Examiner

David Q Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>18</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wan (us Patent Number 6385460) in view of Garceran et al. (US Patent Number 6522888).

Regarding claim 1, Wan teaches a method for operating a mobile equipment in a wireless network, comprising steps of (abstract, figs. 1-8): determining a value of a parameter that is indicative of a signal quality experienced by the ME (col. 7, lines 22-23); calculating in the ME an indication of link quality experience by the ME, the calculation employing a filter having a finite filter length that is a function of the value of the parameter (col.7, lines 18-26 filtering defined as averaging in page 10, paper 17). Wan is silent to disclose reporting the calculated indication of link quality to the wireless network. However, Garceran et al. discloses reporting the calculated indication of link quality to the wireless network (see col. 5, lines 33-67).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Garceran et al to Wan in order to improve signal quality.

Regarding claim 2, Wan teaches a method modified by Garceran et al. also discloses deriving an indication of ME speed in the wireless network; and transmitting the speed indication to the ME (see col. 10, lines 52-56 of Garceran et al); and transmitting the speed indication to the ME (see col. 9, lines 15-20 of Garceran et al).

Regarding claim 3, Wan teaches transmitting uses a point-to-point message (col. 7, line 27-col. 8, line 40).

Regarding claim 4, Wan teaches a method modified by Garceran et al comprising all of the limitations as claimed. They are silent to disclose wherein the step of transmitting places the speed indication in padding bits of a point-to-point message. However, examiner takes official notice that transmitting places the speed indication in padding bits of a point-to-point message is well known in the art so that system can detect bit error of message easily.

Regarding claim 5, Wan teaches a method modified by Garceran et al comprising all of the limitations as claimed. They are silent to disclose wherein the step of transmitting uses a message sent on a Packet Associated Control Channel (PACCH). However, examiner takes official notice transmitting uses a message sent on a Packet Associated Control Channel (PACCH) is well known in the art so that system can communicate with mobile equipment.

Regarding claims 6-10 and 19, Wan teaches a method for operating a mobile equipment in a wireless network, comprising steps of (abstract, figs. 1-8): determining a value of a parameter that is indicative of a signal quality experienced by the ME (col. 7, lines 22-23); calculating in the ME an indication of link quality experience by the ME, the calculation employing a filter having a finite filter length that is a function of the value of the parameter (col. 7, lines 18-26 filtering defined as averaging in page 10, paper 17). Wan is silent to disclose reporting the calculated indication of link quality to the wireless network; deriving an indication of ME speed in the wireless network; and transmitting the speed indication to the ME. However, Garceran et al. discloses reporting the calculated indication of link quality to the wireless network (see col. 5, lines 33-67); deriving an indication of ME speed in the wireless network; and transmitting the speed indication to the ME (see col. 9, lines 15-20 and col. 10, lines 52-56 of Garceran et al.). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Garceran et al to Wan in order to improve signal quality.

They are silent to disclose wherein the step of transmitting uses a message sent in a Packet System Identification 13 message sent on a Packet Associated Control Channel (PACCH); transmitting uses a plurality of bits into a Packet System Identification 13 message sent on a Packet Associated Control Channel (PACCH); transmitting uses a plurality of bits placed into a padding bits of a Packet System Identification 13 message sent on a Packet Associated Control Channel (PACCH); transmitting uses a plurality of bits for indicating a plurality of speed subranges of a speed range; transmitting uses four bits for indicating 16 speed subranges within a speed range. However, examiner takes official

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notice transmitting uses a message sent in a Packet System Identification 13 message sent on a Packet Associated Control Channel (PACCH) and a plurality of bits into a Packet System Identification 13 message sent on a Packet Associated Control Channel (PACCH); transmitting uses a plurality of bits placed into a padding bits of a Packet System Identification 13 message sent on a Packet Associated Control Channel (PACCH); and transmitting uses a plurality of bits for indicating a plurality of speed subranges of a speed range; transmitting uses four bits for indicating 16 speed subranges within a speed range are well known in the art so that system can communicate with mobile equipment.

Regarding claims 11-12, Wan also teaches wherein the determined parameter is used to modify and calculate a forgetting factor that influences a length of a filter that operates on link quality measurement data (col. 10, line 25-col. 12, line 45, col. 13, lines 16-50).

Regarding claims 13 and 14, Wan also teaches wherein the determined parameter is used to modify and replace a forgetting factor that is received in a broadcast message from the wireless network, the forgetting factor influencing the length of the filter that operates on link quality measurement data (col. 10, line 25-col. 12, line 45, col. 13, lines 16-50).

Regarding claim 15, Wan also teaches wherein the step of calculating takes into account a derivative of speed of the ME (col. 10, line 25-col. 12, line 45, col. 13, lines 16-50).

Regarding claim 16 Wan teaches wherein the step of calculating operates on a plurality of measurements of one of a mean Bit Error Probability or a coefficient of variation of a Bit Error Probability (col. 7, line 35-col. 8, line 35).

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3. Claims 17-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garceran et al. (US Patent Number 6522888) in view of Wan (us Patent Number 6385460) and further in view of Butovisch et al. (US Patent Number 6259927).

Regarding claim 17, Garceran teaches wireless communications system comprised of a wireless network and at least one mobile equipment located in a serving cell of said wireless network (see fig. 1), further comprising a unit in said wireless network for deriving an indication of a speed of said ME within the serving cell (see col. 10, lines 52-56); a transmitter in said wireless network for transmitting the indication of the ME speed to the ME; a receiver in said ME for receiving said transmitted speed indication (see col. 9, lines 15-20). Garceran is silent to disclose a processor in said ME for implementing a filter for filtering a sequence of link quality measurement data, said filter having a finite filter length that is a function of a parameter having a value that is a function of said received transmitted speed indication; and a transmitter in said ME for transmitting an indication of said filtered link quality measurement data to a receiver of said wireless network. However, Wan discloses a processor in said ME for implementing a filter for filtering a sequence of link quality measurement data, said filter having a finite filter length that is a function of a parameter having a value that is a function of said received transmitted speed indication (col.7, lines 63-67); and Butovisch discloses a transmitter in said ME for transmitting an indication of said filtered link quality measurement data to a receiver of said wireless network (see col.8, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Butovisch and Wan to Garceran in order to improve signal quality.

Regarding claim 18, Garceran discloses a wireless communication system modified by Wan and Butovisch comprising all of the limitations as claimed. Wan also teaches wherein the step of calculating operates on a plurality of measurements of one of a mean Bit Error Probability or a coefficient of variation of a Bit Error Probability (col. 7, line 35-col. 8, line 35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Wan to Garceran and Butovisch in order to improve signal quality.

Regarding claim 20, Garceran teaches a method for operating a wireless communications system comprised of a wireless network and a plurality of mobile equipment (ME) located in at least one serving cell of said wireless network (see fig. 1), comprising steps of: determining in the wireless network an indication of a signal quality experienced by individual ones of the plurality of ME (see col. 3, lines 35-40); transmitting the determined indications to individual ones of the ME using a point-to-point message; in a particular one of the plurality of ME, receiving the transmitted indication (see col. 9, lines 15-20). Garceran is silent to disclose using the received indication for setting a length of a filter that is employed in a filtering operation that operates on a sequence of link quality measurement data; and transmitting a result of the filtering operation to the wireless network. However, Wan discloses using the received indication for setting a length of a filter that is employed in a filtering operation that operates on a sequence of link quality measurement data (col. 7, lines 63-67); and Butovisch discloses transmitting a result of the filtering operation to the wireless network (see col. 8, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Butovisch and Wan to Garceran in order to improve signal quality.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q Nguyen whose telephone number is 703-605-4254. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN

David Nguyen

[Signature]

DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600